

of being bound by an anti-hGH antibody.

108. A method according to claim 107 wherein the first peptidyl fragment comprises SEQ. ID. No. 1.

109. A method according to claim 107 wherein the first peptidyl fragment comprises SEQ. ID. No. 2.

110. A method according to claim 107 wherein the first peptidyl fragment comprises SEQ. ID. No. 3.

111. A method according to claim 107 wherein the first peptidyl fragment is between 20 and 200 residues in length.

112. A method according to claim 78 wherein the first peptidyl fragment is capable of being bound by an anti-hGH antibody.

113. A method according to claim 78 wherein the first peptidyl fragment comprises SEQ. ID. No. 1.

114. A method according to claim 78 wherein the first peptidyl fragment comprises SEQ. ID. No. 2.

115. A method according to claim 78 wherein the first peptidyl fragment comprises SEQ. ID. No. 3.

116. A method according to claim 78 wherein the first peptidyl fragment is between 20 and 200 residues in length.

117. A method according to claim 78 wherein the C-terminus of the first peptidyl fragment is adjacent the N-terminus of the second peptidyl fragment.

118. A method according to claim 78 wherein the N-terminus of the first peptidyl

fragment is adjacent the C-terminus of the second peptidyl fragment.

119. A method according to claim 78 wherein the first peptidyl fragment is positioned within the second peptidyl fragment.

120. A method according to claim 78 wherein the method further includes cleaving the at least one cleavable peptidyl fragment.

121. A method according to claim 78 wherein the at least one cleavable peptidyl fragment is an Arg or Lys residue.

122. A method according to claim 78 wherein the at least one cleavable peptidyl fragment is at least 2 amino acids in length where the C-terminal amino acid residue is selected from the group consisting of Arg and Lys.

123. A chimeric protein comprising:

a first peptidyl fragment;

a second peptidyl fragment comprising an amino acid sequence which exhibits insulin-like bioactivity when folded in a bioactive conformation; and

at least one cleavable peptidyl fragment linking the first and second peptidyl fragments;

wherein the first peptidyl fragment is selected such that it mediates folding of the second peptidyl fragment to cause the second peptidyl fragment to adopt the bioactive conformation.

124. A protein according to claim 123 wherein the second peptidyl fragment is capable of being bound by an anti-human-insulin antibody.

125. A protein according to claim 123 wherein the second peptidyl fragment is an insulin precursor.

126. A protein according to claim 123 wherein the second peptidyl fragment is an insulin precursor of human origin.

127. A protein according to claim 123 wherein the second peptidyl fragment comprises SEQ. ID. No. 4.
128. A protein according to claim 123 wherein the second peptidyl fragment comprises SEQ. ID. No. 5.
129. A protein according to claim 123 wherein the second peptidyl fragment comprises A chain and B chain amino acid sequences of human insulin separated by an amino acid sequence between 1 and 34 residues in length.
130. An assay for improving bioactive conformation mediation activity comprising:
 - taking an amino acid sequence of a first recombinant protein comprising a first peptidyl fragment, a second peptidyl fragment comprising an amino acid sequence which comprises at least two cysteine residues which form at least one cysteine bridge in a bioactive conformation of the second peptidyl fragment, and a cleavable peptidyl fragment linking the first and second peptidyl fragments, where the first peptidyl fragment has sufficient homology to at least a first 20 N-terminal amino acids of human growth hormone (hGH) protein that the first peptidyl fragment mediates formation of the bioactive conformation of the second peptidyl fragment;
 - expressing a second recombinant protein where the amino acid sequence of the first peptidyl fragment has been modified relative to the first recombinant protein;
 - causing the second peptidyl fragment of the second recombinant protein to adopt the bioactive conformation;
 - determining a yield for the step of causing the second peptidyl fragment of the second recombinant protein to adopt the bioactive conformation; and
 - comparing the yield for the step of causing the second peptidyl fragment of the second recombinant protein to adopt the bioactive conformation to a yield for causing the second peptidyl fragment of the first recombinant protein to adopt the bioactive conformation.